

THOMSON MULTI MEDIA

Brandt FERGUSON SABA TELEFUNKEN THOMSON

AUDIO



**SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTACION TECNICA**

**THOMSON AM 1250
AM 1255**

Version (PC*): A

*PC: The version code is indicated either in the battery compartment or on the back of the unit - ce code version est indiqué dans le compartiment à piles ou au dos de l'appareil - PC: Version des Geräts wird im Batteriefach oder auf der Rückseite angegeben - il codice della versione è indicato nello scompartimento delle batterie o sul retro dell'apparecchio - el código de la versión está indicado en el compartimento de las pilas o en la parte trasera del aparato.



**Technical data - Caractéristiques principales
Technische Daten - Dati tecnici - Características del aparato**

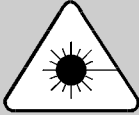
Type of set : Cassette radio recorder / compact disc Type d'appareil : Combiné radio cassette / CD Geräteart : CD-Radio Cassetten Portable Tipo d'apparecchio : Insieme radio cassette / CD Tipo de aparato : Radio cassette / CD		 3,5 kg	
Power supply : Alimentation : 230 V ~ Stromversorgung : Alimentazione : Alimentación :		Nominal output power : Puissance nominale de sortie : 2 x 12 W (Rms) Nennausgangsleistung : 2 x 30 W (Music.) potenza nominale di uscita : Potencia nominal de salida :	
 FM - MF : 87,5 - 108 MHz MW - PO : 520 - 1620 kHz LW - GO : 150 - 283 kHz		Sensitivity : Sensibilité : FM - MF : 20 µV (S/N = 30 dB) Empfindlichkeit : MW - PO : 2000 µV/m (S/N = 20 dB) Sensibilità : LW - GO : 4000 µV/m (S/N = 20 dB) Sensibilidad :	
 Frequency response : Courbe de réponse : 125 Hz - 6,3 kHz Frequenzgang : (+3/-5 dB) Curva di risposta : Curva de respuesta : Wow and flutter : Fluctuations : 0,35 % Gleichlauf : Fluttuazioni : Fluctuaciones :		Signal to noise ratio : Rapport signal / bruit : 40 dB Geräuschspannungsabstand : Rapporto segnale / disturbo : Relación señal / ruido : 4,75 cm/s C60 : 170 s	
DAD Disc rotation speed : Vitesse de rotation du disque : 200 → 500 tr/m CD-Drehgeschwindigkeit : Velocità di rotazione del disco : Velocidad de rotación del disco :		Frequency response : Courbe de réponse : 20 Hz - 20kHz Frequenzgang : (±2 dB) Curva di risposta : Curva de respuesta :	
Dynamic range : Gamme dynamique : 60 dB Dynamikumfang : Dinamica : Dinámica :		Signal to noise ratio : Rapport signal / bruit : 54 dB Geräuschspannungsabstand : Rapporto segnale / disturbo : Relación señal / ruido :	



WARNING : Before servicing this chassis read the safety recommendations.
ATTENTION : Avant toute intervention sur ce châssis, lire les recommandations de sécurité.
ACHTUNG : Vor jedem Eingriff auf diesem Chassis, die Sicherheitsvorschriften lesen.
ATTENZIONE : Prima di intervenire sullo chassis, leggere le norme di sicurezza.
IMPORTANTE : Antes de cualquier intervención, leer las recomendaciones de seguridad.

Code : 351 548 30 - 05/01 / 4,2M - CRKD1291 Print.

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CLASS 1 LASER PRODUCT
APPAREIL A LASER DE CLASSE 1
LASER KLASSE 1
APPARECCHIO CON LASER DI CLASSE 1
APARATO CON LASER DE CLASE 1

DANGER : Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.

ATTENTION : Le rayon laser est invisible. Eviter l'exposition directe lors de la maintenance.

VORSICHT BEI REPARATUREN : Bei geöffneter Schublade und Defekt der Sicherheitsvorrichtungen besteht die Gefahr unsichtbaren Laserlichts. Niemals direkt in den Laserstrahl sehen.

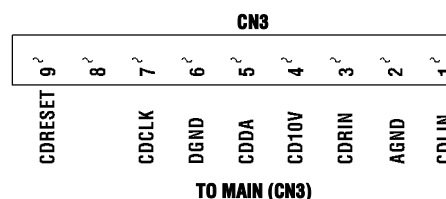
ATTENZIONE : Il raggio laser è invisibile. Evitare l'esposizione diretta durante la manutenzione.

IMPORTANTE : El rayo laser es invisible. Evitar la exposición directa en el momento del mantenimiento.

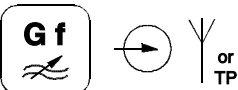






DIGITAL PROCESSING SCHEMATIC DIAGRAM - SCHEMA DU TRAITEMENT DIGITAL - SCHALTBILD DIGITALVERARBEITUNG - SCHEMA ELABORAZIONE DIGITALE - ESQUEMA DEL TRATAMIENTO DIGITAL

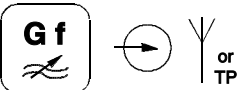




The complete Digital Processing Module is available from A.S.S. under Part Number :
En SAV, l'ensemble du module traitement digital est géré sous le code :
Die Service Bestell-Nr. für das Modul "Digital Processing kompl." ist :
Il codice del modulo completo di elaborazione digitale è :
En postventa, el modulo completo tratamiento digital lleva el código :

106 389 60

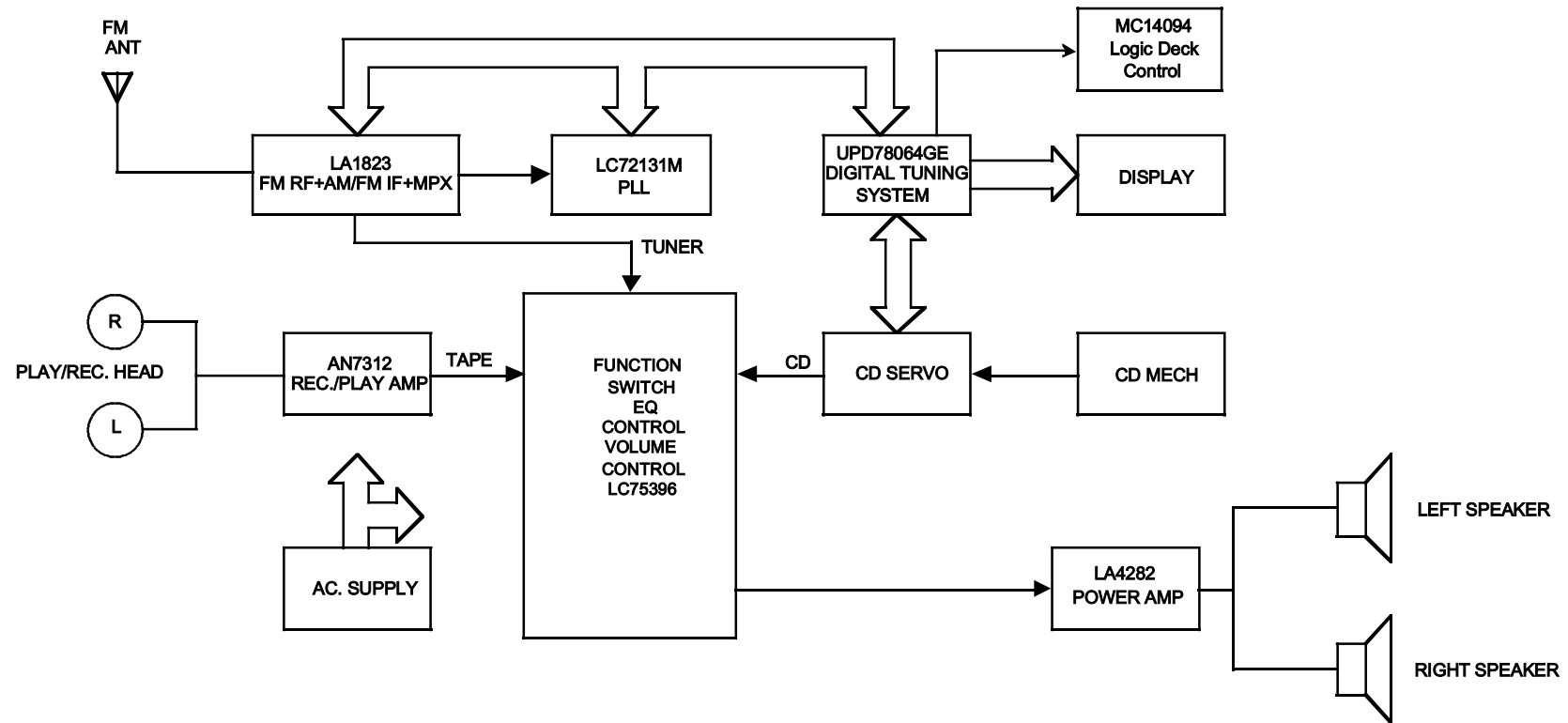


ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZION - AJUSTES

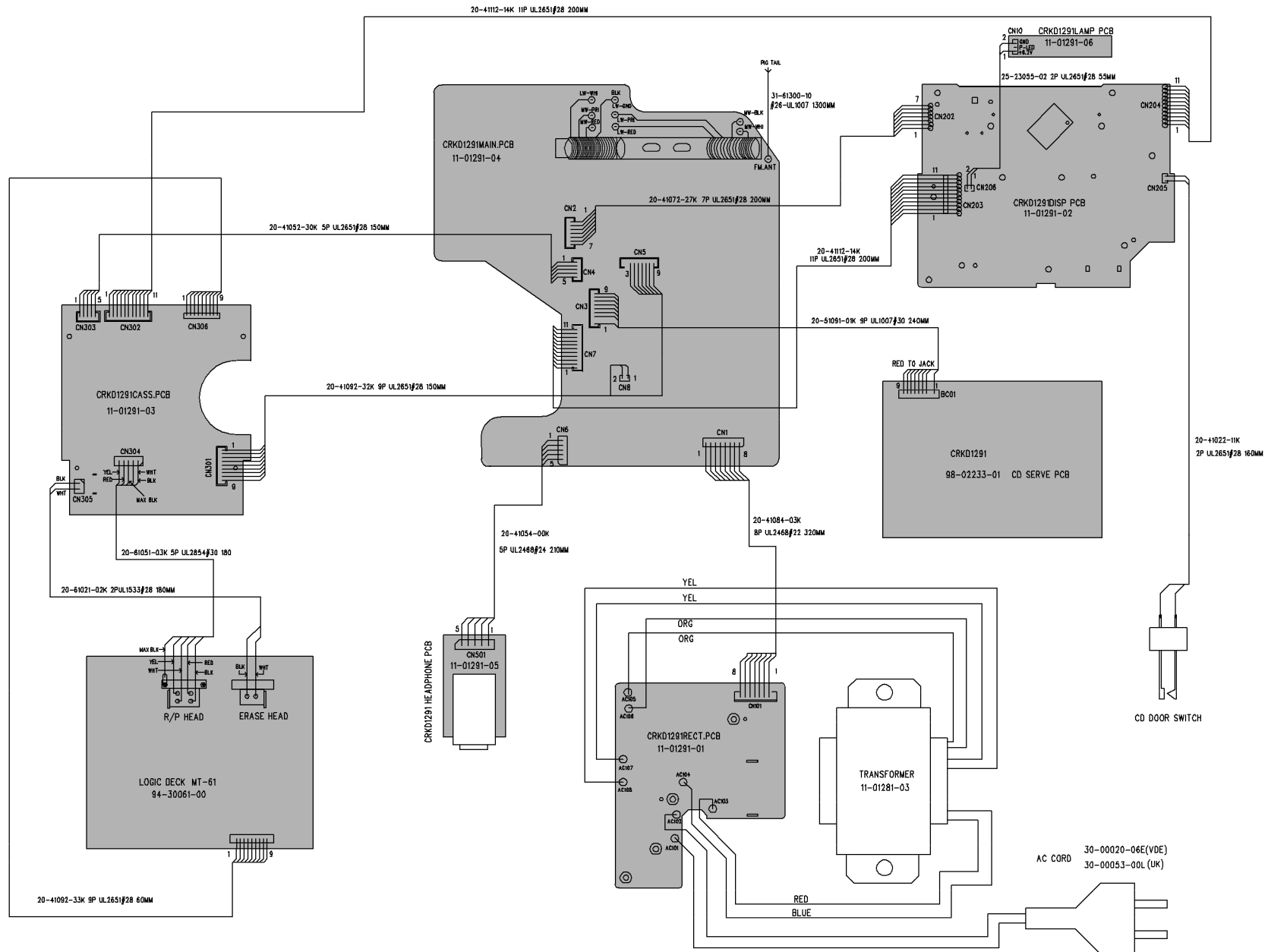
AM alignment						
			f			
MW	1		450 kHz		T4	Adjust for maximum outpout
	2		522 kHz	522 kHz	T2	Vt = 1,1 V
	3		1620 kHz	1620 kHz	T2	Vt = 7,2 V
LW	1		150 kHz	150 kHz	T1	1.1 V
	2		283 kHz	283 kHz		5.9 V

FM alignment						
			f			
FM	1		87.5 MHz	87.5 MHz	L11	Vt = 2,2V
	2		108 MHz	108 MHz		Vt = 7,2 V
	3		90.10 MHz	90.10 MHz	L10	
	4		106.10 kHz	106.10 kHz	TC3	

BLOCK DIAGRAM - SCHEMA SYNOPTIQUE - BLOCKSCHALTBIID - SCHEMA A BLOCCHI - ESQUEMA DE BLOQUES



WIRING DIAGRAM - SCHEMA D'INTERCONNECTIONS - VERDRAHTUNGSPLAN - DIAGRAMMA DELLE INTERCONNESSIONI - ESQUEMA DE INTERCONEXIONES



The schematic diagram illustrates the internal circuitry of a portable digital music player. It is divided into several functional blocks:

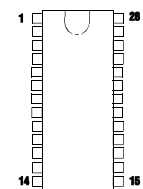
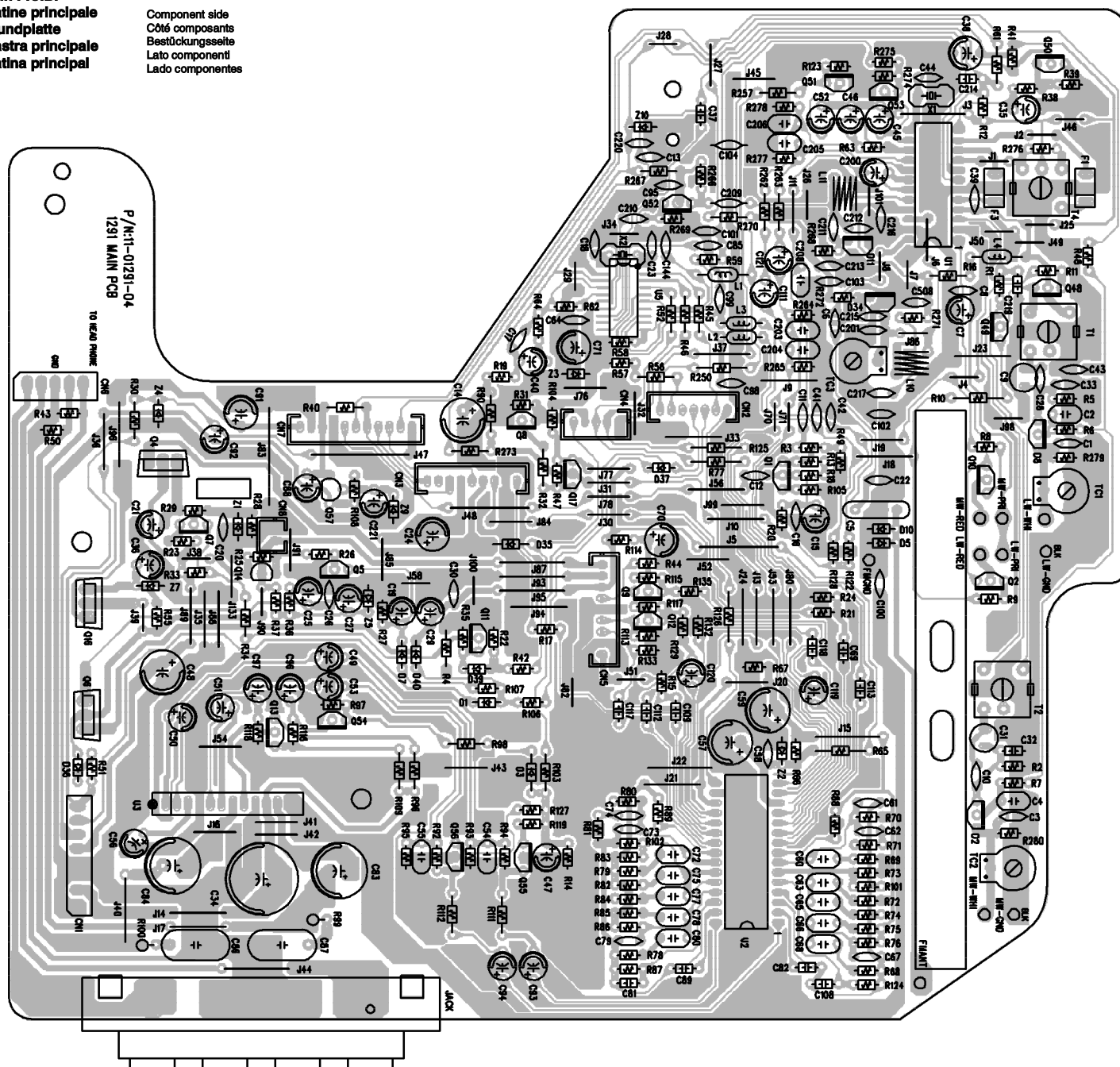
- FM/AM Tuner and Processor:** Located in the upper left, it includes an FM antenna input, a tuner IC (U1, LC75392), and various associated passive components for signal processing.
- Central Processing Unit (U2):** The LC75392 IC is the core of the device, handling digital signal processing and control functions. It is connected to various input and output pins.
- Power Management:** The lower right section shows the power regulation circuit, including a 3.3V regulator (U3), a 1.8V regulator (U4), and a battery connection point for a 3.0V battery.
- Input/Output Ports:** The left side of the diagram shows various connectors for FM antenna, tape, USB, and other peripherals.
- Audio Output:** The bottom right section includes a speaker output stage with a speaker (SPK) and a headphone output stage with a headphone jack (HPL).

The schematic is highly detailed, showing component values, pin connections, and a clear layout for assembly. A table of component values is provided at the bottom right:

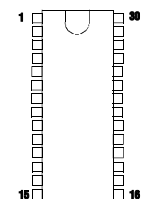
Component	Value
R1	10k
R2	10k
R3	10k
R4	10k
R5	10k
R6	10k
R7	10k
R8	10k
R9	10k
R10	10k
R11	10k
R12	10k
R13	10k
R14	10k
R15	10k
R16	10k
R17	10k
R18	10k
R19	10k
R20	10k
R21	10k
R22	10k
R23	10k
R24	10k
R25	10k
R26	10k
R27	10k
R28	10k
R29	10k
R30	10k
R31	10k
R32	10k
R33	10k
R34	10k
R35	10k
R36	10k
R37	10k
R38	10k
R39	10k
R40	10k
R41	10k
R42	10k
R43	10k
R44	10k
R45	10k
R46	10k
R47	10k
R48	10k
R49	10k
R50	10k
R51	10k
R52	10k
R53	10k
R54	10k
R55	10k
R56	10k
R57	10k
R58	10k
R59	10k
R60	10k
R61	10k
R62	10k
R63	10k
R64	10k
R65	10k
R66	10k
R67	10k
R68	10k
R69	10k
R70	10k
R71	10k
R72	10k
R73	10k
R74	10k
R75	10k
R76	10k
R77	10k
R78	10k
R79	10k
R80	10k
R81	10k
R82	10k
R83	10k
R84	10k
R85	10k
R86	10k
R87	10k
R88	10k
R89	10k
R90	10k
R91	10k
R92	10k
R93	10k
R94	10k
R95	10k
R96	10k
R97	10k
R98	10k
R99	10k
R100	10k

Main P.C.B.
Platine principale
Grundplatte
Plastra principale
Platina principal

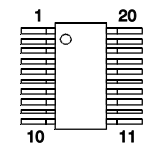
Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes



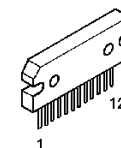
LA 1823



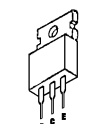
LC75392



LC7231



LA4282

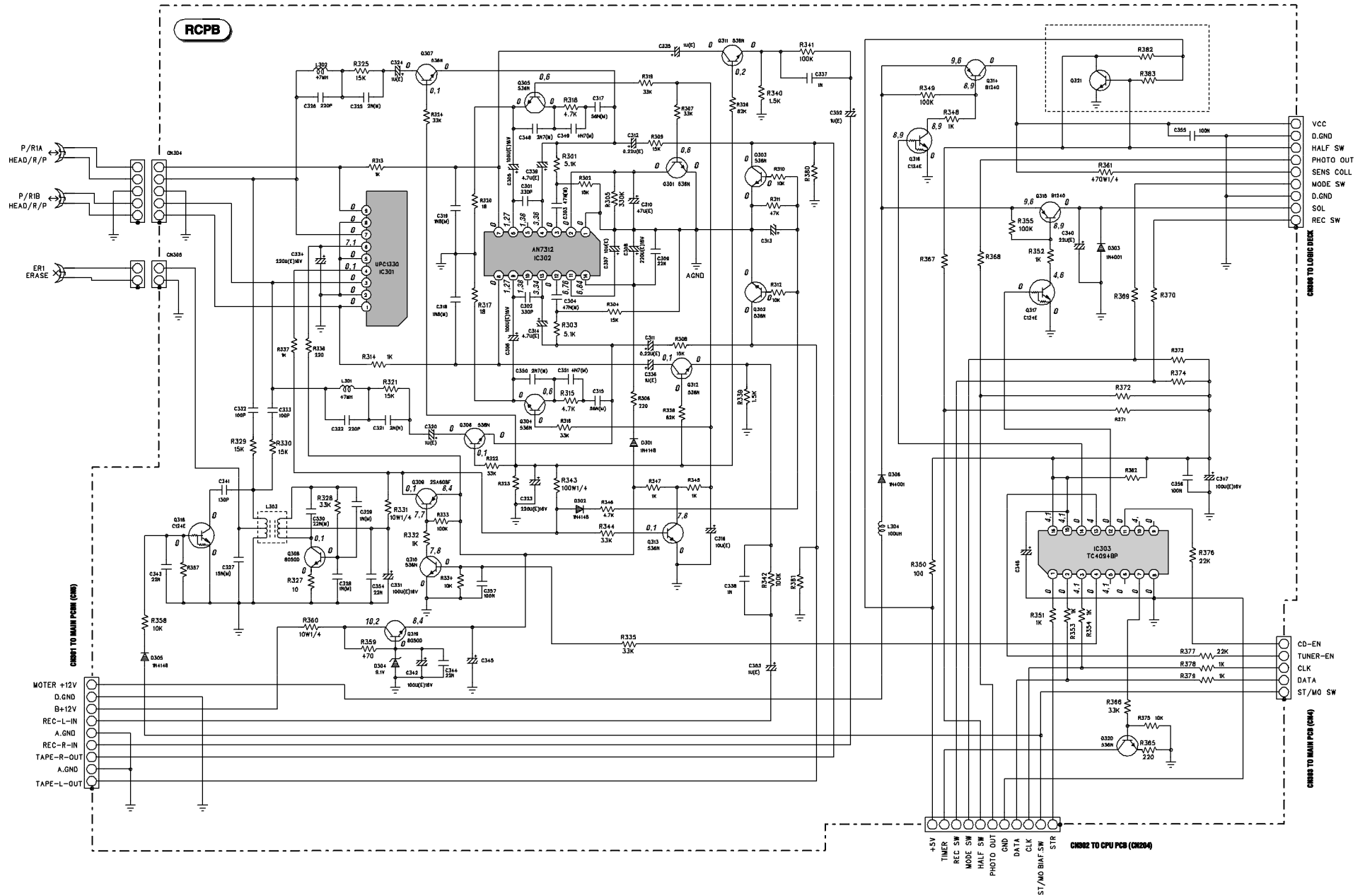


KTD 2058Y



2SA608NG
2SC536NF
8050C
KSA928A

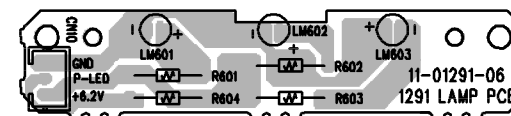
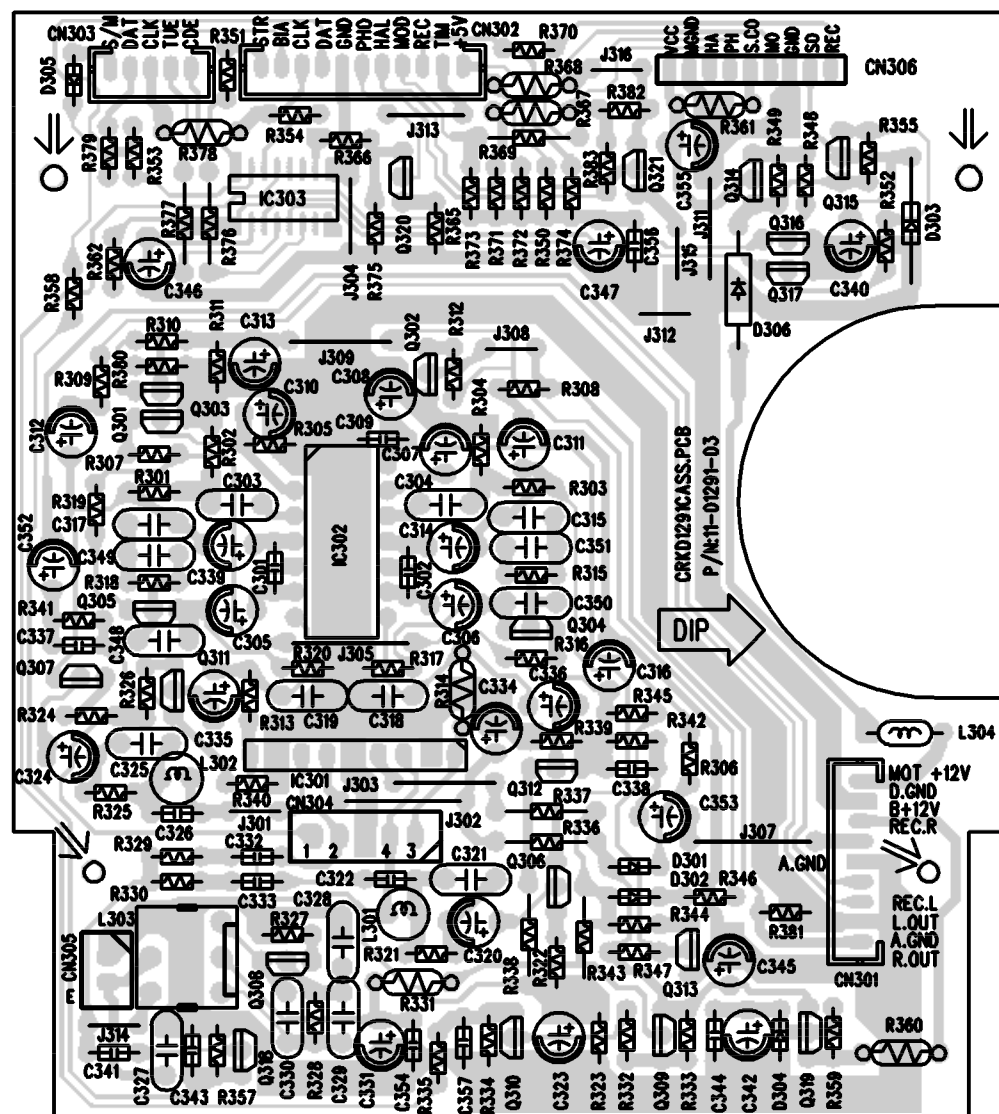
RECORD / PLAYBACK SCHEMATIC DIAGRAM - SCHEMA ENREGISTREMENT / LECTURE - SCHALTBILD AUFNAHME / WIEDERGABE - SCHEMA REGISTRAZIONE / RIPRODUZIONE - ESQUEMA GRABACIÓN / REPRODUCCIÓN



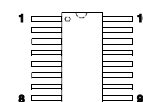
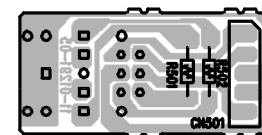
Playback / record P.C.B.
Platine enregistrement / lecture
Ltpl. Aufnahme / Wiedergabe
Plastra registrasione / riproduzione
Platina grabación / reprodución

Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes

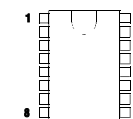
Led P.C.B.
Platine Led
Ltpl. Led
Plastra Led
Platina Led



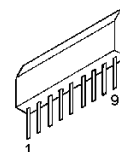
**Headphone-Jack P.C.B.
Platine prise-casque
Kopfhörerbuchse Ltpl.
Plastra presa per cuffia
Platina toma auriculares**



MC14094

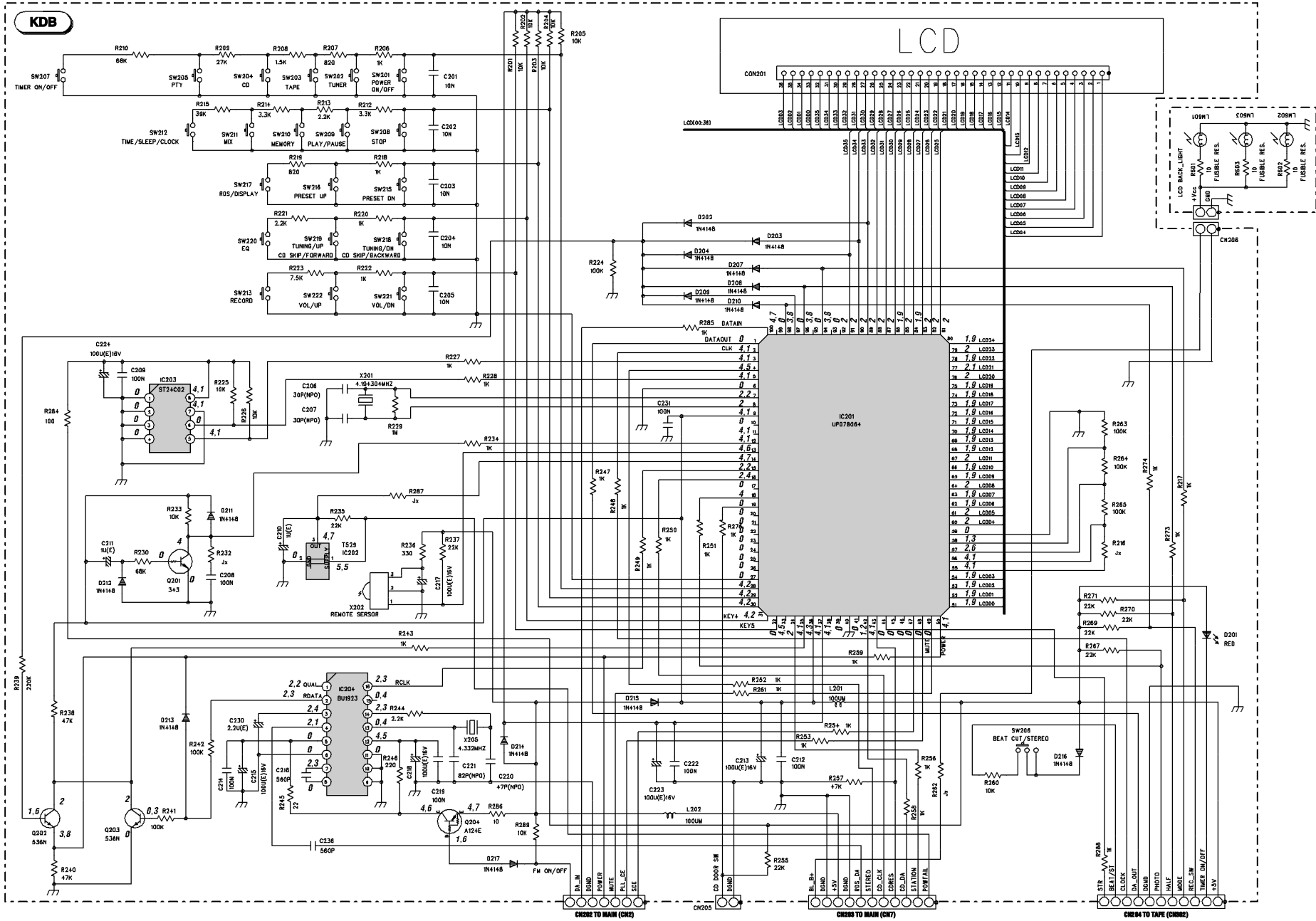


AN7312



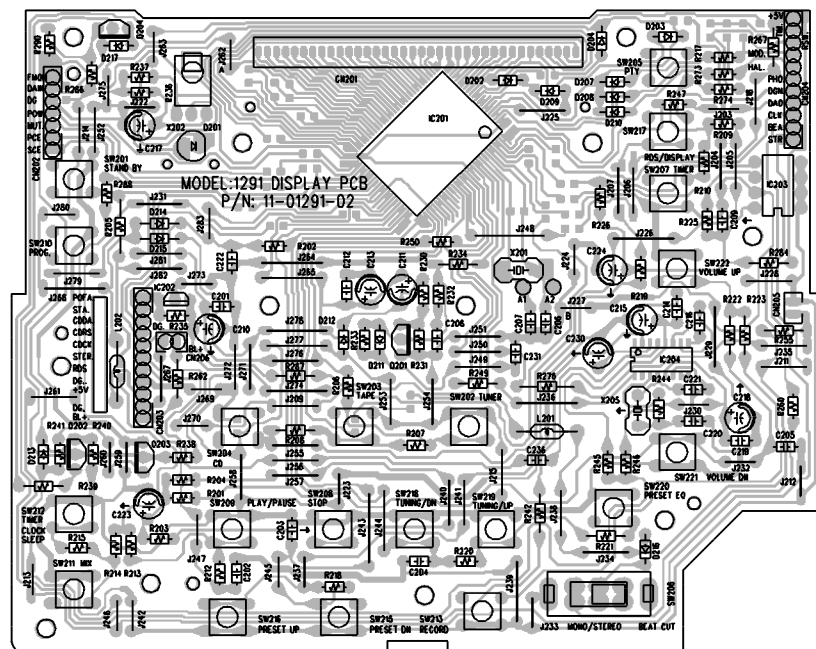
UPC1330HA

CONTROL / DISPLAY SCHEMATIC DIAGRAM - SCHEMA COMMANDES / AFFICHEUR - SCHALTBILD BEDIENTEIL / ANZEIGE - SCHEMA COMANDI / INDICATORE - ESQUEMA MANDOS / INDICADOR

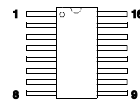


Controls / display P.C.B.
Platine commandes / afficheurs
Ltpl. Bedientell / Anzeig
Plastra comandi / Indicator
Platina de mandos / Indicadores

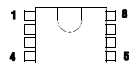
Solder side
Côté cuivre
Lötseite
Lato saldature
Lado del cobre



DTC124ES
2SC2999D
DTC343S



BU 1923F

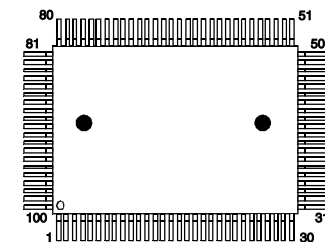
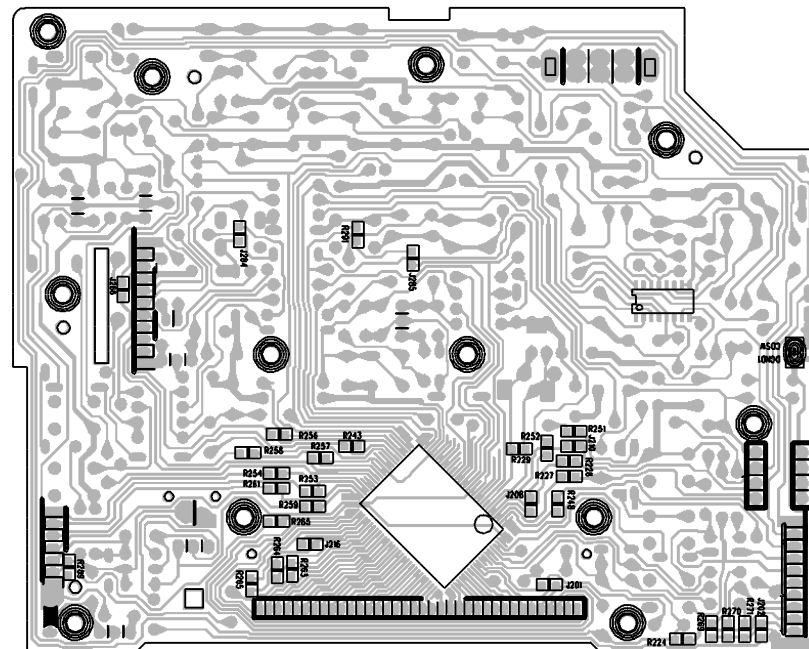


ST24C02S

CRKD 1291
First issue 05 / 01

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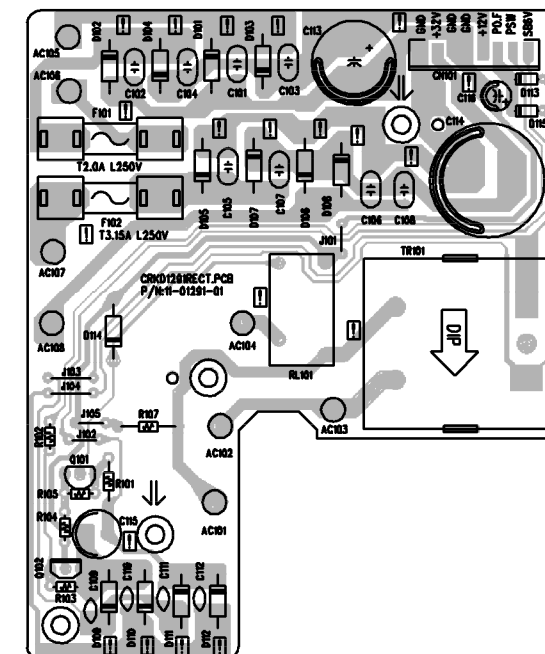
Solder side
Côté soudure
Lötseite
Lato saldature
Lado del cobre



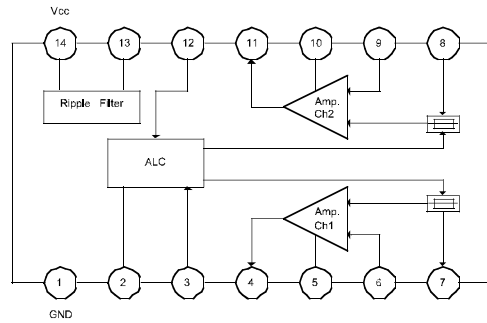
UPD 78P064GF

18

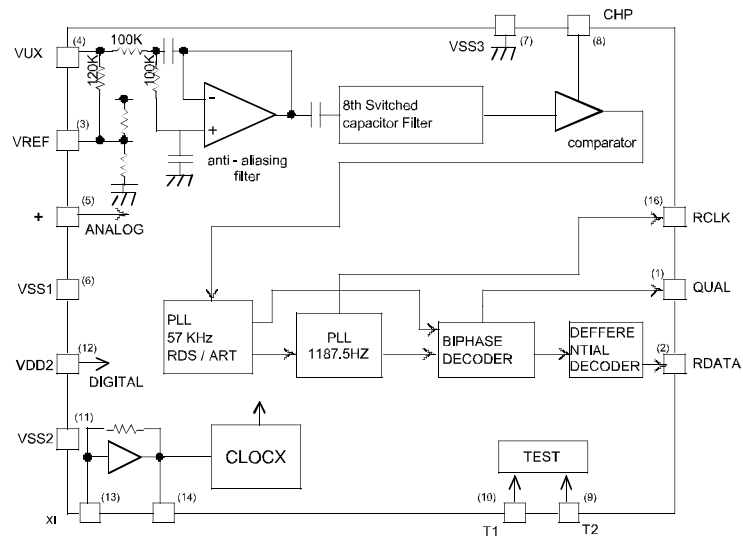
Power supply
Platine alimentation
Ltpl. Netzteil
Plastra alimentazionePlatina
alimentación



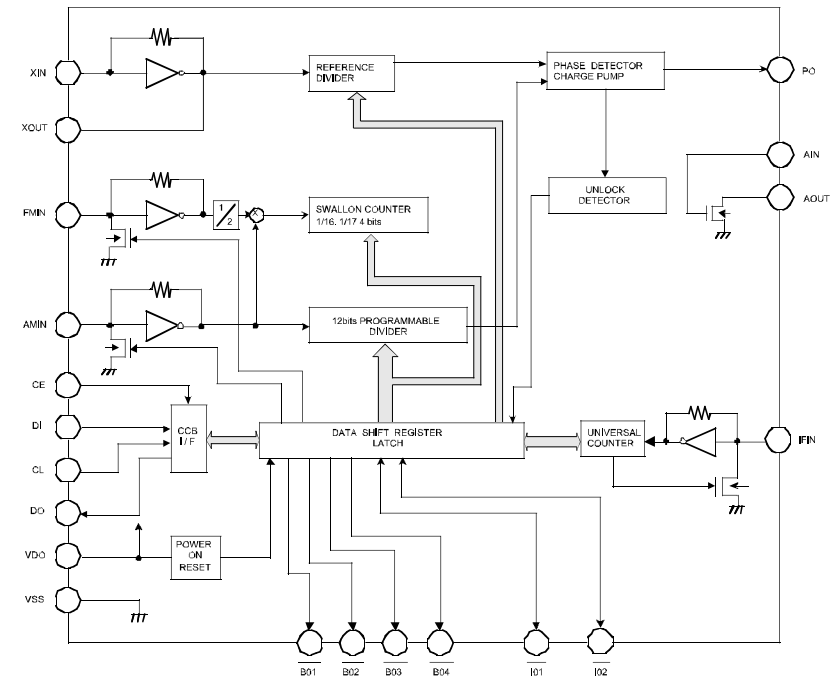
IC302 AN7312

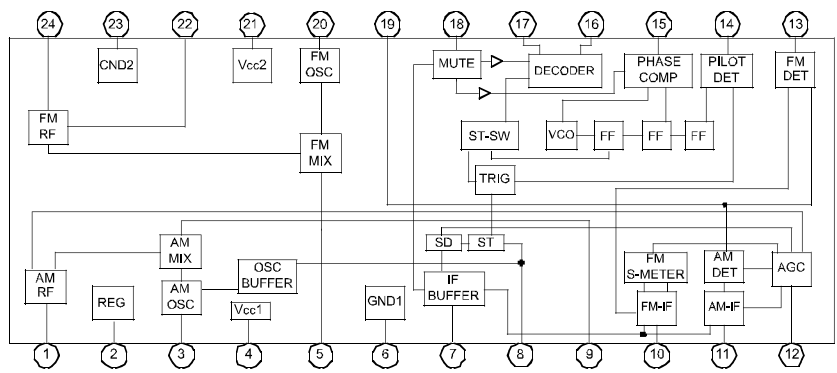


IC204 BU1923F

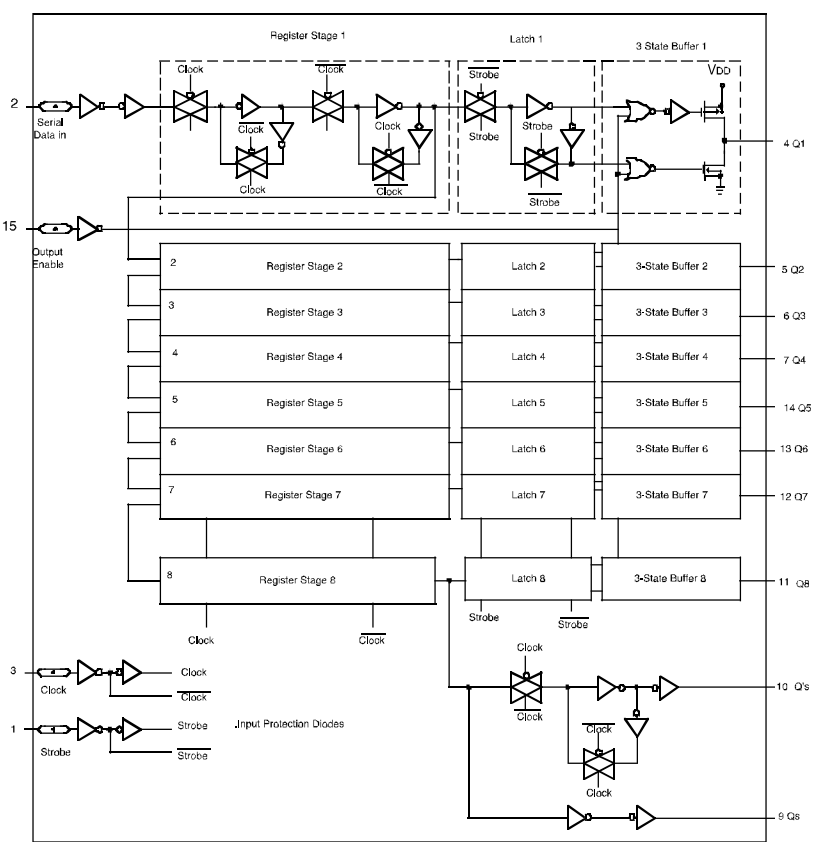
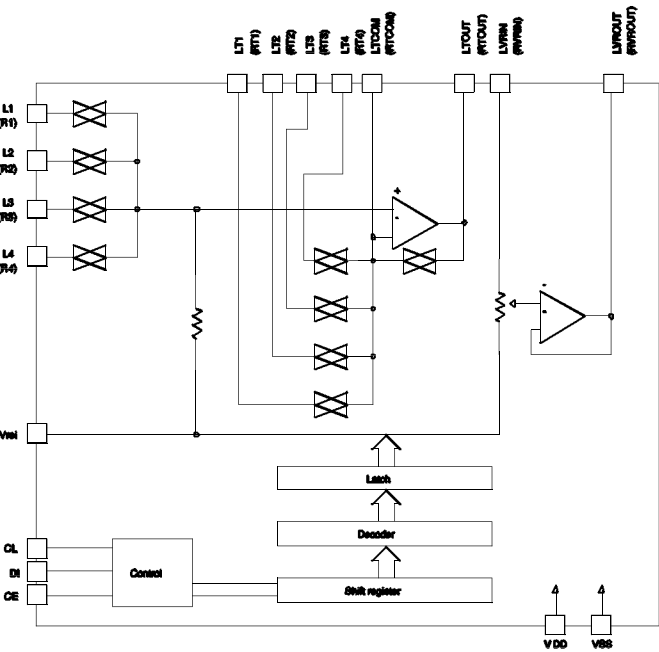


U5 LC72131M

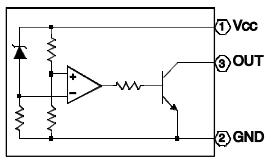




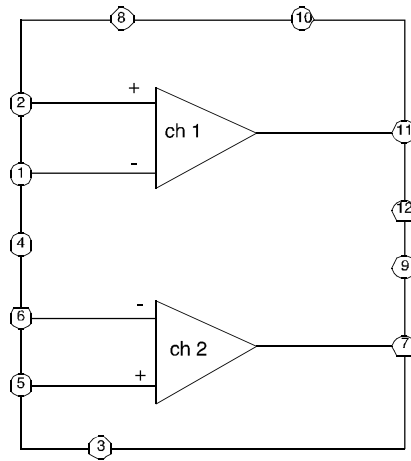
U2 LC 75392



IC 202 PST 529



U3 LA4282



IC 201 UPD78064 GF

